

In the Claims

1           1. (Currently amended) An integrated conventional air  
2 conditioning system having an auxiliary power source for use in  
3 trucks powered by a main internal combustion diesel engine,  
4 consisting of:

5           an air conditioner compressor having an single input shaft  
6 ~~said shaft~~ including with a first pulley and a second pulley  
7 coupled thereto, said first pulley being clutch engagable and  
8 adapted to cooperate with a first flexible continuous belt driven  
9 by said main engine for providing rotation to said compressor, said  
10 second pulley adapted to cooperate with a second flexible  
11 continuous belt driven by an electric motor for providing rotation  
12 to said compressor pulley coupled thereto and a belt-driven pulley  
13 ~~mounted pulley thereon, said pulley operable to drive said shaft~~  
14 ~~independently of said clutch engagable pulley, said air conditioner~~  
15 ~~compressor mounted to said main engine, said clutch engagable~~  
16 ~~pulley rotatable by a main engine mounted pulley when said main~~  
17 ~~engine is operating;~~

18           an electric motor mounted to ~~and mechanically linked~~ said main  
19 engine ~~air conditioner compressor, said electric motor~~ having a  
20 second clutch engagable pulley operatively coupled to ~~the~~ an output  
21 shaft thereof ~~thereto~~, wherein said second clutch engagable pulley  
22 is adapted to cooperate with said second belt for selectively

1 ~~rotating said compressor is rotatable when said electric motor is~~  
2 ~~operating, said second clutch engagable pulley coupled to said~~  
3 ~~belt-driven pulley mounted on said shaft;~~

4 means for selectively and independently engaging said first  
5 clutch engagable pulley and said second clutch engagable pulley for  
6 operation of said air conditioner compressor;

7 an auxiliary power ~~plant~~ source for providing electrical power  
8 for the operation of said electric motor, said auxiliary power  
9 plant including a diesel engine/generator set;

10 whereby said conventional air conditioning system introduces  
11 cool air through the truck mounted air conditioning ducts while the  
12 main engine is operating or when said auxiliary power source and  
13 said electric motor is employed.

1 2. (Currently amended) The integrated conventional air  
2 conditioning system for use with an auxiliary power source  
3 according to claim 1 wherein said auxiliary power source is a  
4 horizontally disposed one cylinder liquid cooled ~~Kubota diesel~~  
5 engine/generator set.

1 3. (Original) The integrated conventional air conditioning  
2 system for use with an auxiliary power source according to claim ~~1~~  
3 2 wherein said auxiliary power source is a low profile auxiliary  
4 power plant placed within an enclosure having an interconnected

5 floor, opposite vertical side walls, opposite vertical end walls,  
6 and a top parallel to said floor, said auxiliary power plant  
7 including an integral engine/generator set fixed in said enclosure,  
8 said engine/generator set having a liquid cooled internal  
9 combustion engine rigidly connected to an electrical generator by  
10 ~~a thin vertical planar bracket, said engine having at least one~~  
11 ~~cylinder disposed parallel to said floor~~ for turning said generator  
12 to produce electricity ~~said engine/generator set connected to a~~  
13 ~~plurality of isolation mounts to reduce vibration, said isolation~~  
14 ~~mounts fixed to said floor.~~

1 4. (Original) The integrated conventional air conditioning  
2 system for use with an auxiliary power source according to claim 3  
3 wherein the height of said vertical end walls and said vertical  
4 side walls is approximately 15 inches.

1 5. (Original) The integrated conventional air conditioning  
2 system for use with an auxiliary power source according to claim 3  
3 wherein said liquid cooled engine has a radiator and associated  
4 fan, said radiator and said fan remotely mounted.

1 6. (Currently amended) The integrated conventional air  
2 conditioning system for use with an auxiliary power source  
3 according to claim 3 including a radiator located between ~~said a~~

4 perforated wall and said associated fan whereby said fan extracts  
5 heat from said enclosure and provides air flow across said  
6 radiator.

1 7. (Original) The integrated conventional air conditioning  
2 system for use with an auxiliary power source according to claim 1  
3 wherein said first clutch engagable pulley is rotatable by said  
4 engine mounted pulley by use of a flexible belt.

1 8. (Original) The integrated conventional air conditioning  
2 system for use with an auxiliary power source according to claim 1  
3 wherein said second clutch engagable pulley is rotatable by said  
4 electric motor mounted pulley by use of a flexible belt.

1 9. (Currently amended) The integrated conventional air  
2 conditioning system for use with an auxiliary power source  
3 according to claim 1 wherein said means for selectively and  
4 independently engaging said first clutch engagable pulley and  
5 second clutch engagable pulleys includes a relay means for  
6 preventing simultaneous operation of said first and second clutch.

1 10. (Original) The integrated conventional air conditioning  
2 system for use with an auxiliary power source according to claim 2  
3 wherein said auxiliary power plant provides about 3.5 kilowatts.

1           11. (Original) The integrated conventional air conditioning  
2 system for use with an auxiliary power source according to claim 1  
3 wherein said generator in said auxiliary power plant is an  
4 alternating current generator.

1           12. (Currently amended) The integrated conventional air  
2 conditioning system for use with an auxiliary power source  
3 according to claim 1 including a rigid electric motor mounting  
4 plate having a first ~~bolt hole pattern~~ portion adapted to couple  
5 said plate to said air conditioning compressor and a second ~~bolt~~  
6 ~~hole pattern~~ portion adapted to couple said electric motor to said  
7 plate.

1           13. (Original) An integrated conventional air conditioning  
2 system having an auxiliary power source for use in trucks powered  
3 by a main internal combustion diesel engine, consisting of:

4           an air conditioner compressor having a single shaft with first  
5 and second clutch engagable pulleys coupled thereto, said air  
6 conditioner compressor mounted to said main engine, said first  
7 clutch engagable pulley rotatable by a main engine mounted pulley  
8 when said main engine is operating;

9           an electric motor mounted to said air conditioner compressor,  
10 said electric motor having a shaft mounted pulley coupled to said

1 second clutch engagable pulley, said second clutch engagable pulley  
2 rotatable when said electric motor is operating;

3 means for selectively and independently engaging said first  
4 clutch engagable pulley and said second clutch engagable pulley for  
5 operation of said air conditioner compressor;

6 an auxiliary power plant for the operation of said electric  
7 motor;

8 whereby said conventional air conditioning system introduces  
9 cool air through the truck mounted air conditioning ducts while the  
10 main engine is operating or when said auxiliary power source is  
11 employed.

1 14. (Currently amended) The integrated conventional air  
2 conditioning system for use with an auxiliary power source  
3 according to claim 13 wherein said auxiliary power plant is a  
4 horizontally disposed one cylinder liquid cooled ~~Kubota~~ diesel  
5 engine coupled to an electric generator.